



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,239	03/02/2004	Santosh P. Gaur	RPS920020016US1	3606
25299	7590	07/18/2007		
IBM CORPORATION PO BOX 12195 DEPT YXSA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER PERUNGAVOOR, VENKATANARAY	
			ART UNIT 2132	PAPER NUMBER
			MAIL DATE 07/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/791,239	Applicant(s) GAUR ET AL.	
	Examiner Venkat Perungavoor	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/2/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. In the related Application section, the application number of the related cases is missing.

Appropriate correction required.

### *Claim Rejections - 35 USC § 101*

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 23-27 are rejected under 35 USC § 101, as the medium disclosed can be transmission medium( see Page 12 Par. 0047)

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1,12, 23, are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6708273 to Ober et al.(hereinafter Ober).
6. Regarding Claim 1, 12, Ober discloses the input interface configured to receive data into the system see Fig. 3 item “IDMA BUS” & “IDMA INTERFACE”; plurality of cascaded processors coupled to the input interface and output coupled to the respective inputs of

other processors downstream configured to perform cryptographic operations see Fig. 1 item "External Memory Interface Circuit" & "Encrypt Block" & "Hash Block" & Processor Interface; an output interface coupled to the input interface and the output of each processor, output interface configured to transmit data and direct data through the system see Fig. 1 item "PCMCIA Processor Interface".

7. Regarding Claim 23, Ober discloses the receiving of data see Fig. 1A item IDMA BUS; plurality of cascaded processors coupled to the input interface and output coupled to the respective inputs of other processors downstream configured to perform cryptographic operations see Fig. 1 item "External Memory Interface Circuit" & "Encrypt Block" & "Hash Block" & Processor Interface; performing the cryptographic operations using plurality of processors and transmitting the operated-on data through the system see Fig. 1 item "PCMCIA Processor Interface".

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
9. Claims 2-7 13-18, 24-25, 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6708273 to Ober et al.(hereinafter Ober) in view of US Patent 6240513 to Friedman et al.(hereinafter Friedman).

10. Regarding Claim 2-3, 13-14, Ober does not disclose the first processor coupled to input interface for compressing and decompressing data. However, Freidman discloses the processor coupled to the input interface for compressing and decompressing data see Fig. 11 item 1110 using a Lempel-Ziv-Stac(LZS) compression algorithm see Col 15 Ln 63-65. It would be obvious to one having ordinary skill in the art at the time of the invention to include compression and decompression of data in the invention of Ober in order to make payload of packet be transmitted at a faster rate.
11. Regarding Claim 4-5, 15-16, Ober discloses the encryption block for encrypting the data using DES, 3DES see Fig. 1 item "Encrypt Block".
12. Regarding Claim 6-7, 17-18, Ober discloses the hash block used to check integrity using MD5, SHA-1 see Fig. 1 item "Hash Block".
13. Regarding Claim 24-25, Ober discloses the encryption block for encrypting the data using DES, 3DES see Fig. 1 item "Encrypt Block"; the hash block used to check integrity using MD5, SHA-1 see Fig. 1 item "Hash Block". But, Ober does not disclose the first processor coupled to input interface for compressing and decompressing data. However, Freidman discloses the processor coupled to the input interface for compressing and decompressing data see Fig. 11 item 1110 using a Lempel-Ziv-Stac(LZS) compression algorithm see Col 15 Ln 63-65. It would be obvious to one having ordinary skill in the art at the time of the invention to include compression and decompression of data in the invention of Ober in order to make payload of packet be transmitted at a faster rate.

14. Regarding Claim 27, Ober does not disclose the checksum. However, Friedman discloses the checksum see Fig. 10 item "Calculate Checksum". It would be obvious to one having ordinary skill in the art at the time of the invention to include checksum in the invention of Ober in order to check integrity.
15. Claims 8-9, 19-20, 26, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6708273 to Ober et al.(hereinafter Ober) in view of US Patent 6901516 to Howard et al.(hereinafter Howard).
16. Regarding Claim 8-9, 19-20, 26, Ober does not disclose the control information being used to forward information is performing cryptographic operations. However, Howard discloses a controller being used to forward information and controlling operations of units see Fig. 3 item "Controller". It would be obvious to one having ordinary skill in the art at the time of the invention to include a controller to control units in the invention of Ober in order to have centralized control and data that is fed on the bus being direct to known units.
17. Claims 10, 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6708273 to Ober et al.(hereinafter Ober) in view of US Patent 6901516 to Howard et al.(hereinafter Howard) further in view of US Patent 6240513 to Friedman et al.(hereinafter Friedman).

18. Regarding Claim 10, 21, Ober nor Howard disclose the header containing information regarding the identity of algorithms used and the key information and lifetime. However, Friedman disclose the header containing information regarding algorithms and key information see Fig. 10 item 1030. It would be obvious to one having ordinary skill in the art at the time of the invention to include the identity of algorithms used and the key information and lifetime in the invention of Ober in order to have known protocols used.

***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Venkat Perungavoor whose telephone number is 571-272-7213. The examiner can normally be reached on 8:30-5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2132

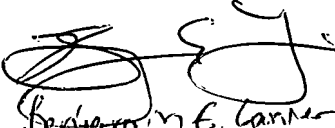
/VP/

Venkat Perungavoor

Examiner

Art Unit 2132

July 10, 2007

  
Benjamin E. Langer  
Examiner DU 2132